1   1.(Currently Amended)   A method of distributing image prints printed on a plurality

2   of printers to a plurality of recipients, the method comprising:

3   receiving an order specifying ~~one or more~~ <u>a plurality of</u> recipients and, for each specified

4   recipient, a set of one or more images associated with that recipient; and

5   for each recipient specified by the order, separating the images associated with the

6   recipient into at least one printable unit of images <u>to generate a contiguous run of prints for the</u>

7   <u>recipient</u>.

1   2.(Original)   The method of claim 1 further comprising, for each printable unit,

2   selecting a printer on which to print the printable unit.

1   3. (Original)   The method of claim 2 further comprising, for each printable unit, printing

2   at least one copy of each image in the printable unit on the selected printer.

1   4.(Original)   The method of claim 1 wherein each image has associated print

2   parameters.

1   5.(Original)   The method of claim 4 wherein the images in a printable unit of images

2   have print parameters that allow the printable unit to be continuously printed.

1   6. (Original)   The method of claim 1 wherein images in a first recipient's image set

2   differ from images in a second recipient's image set.

1   7. (Original)   The method of claim 4 wherein print parameters of a first recipient's

2   image set differ from print parameters of a second recipient's image set.

1   8. (Original)   The method of claim 7 wherein print parameters include one or more of

2   print size, number of copies, and/or print finish.

1   9. (Original)   The method of claim 1 wherein print parameters differ among images
2   within an image set.

1   10. (Original) The method of claim 9 wherein print parameters include one or more of
2   print size, number of copies, and/or print finish.

1   11. (Original) The method of claim 1 wherein each image set comprises an arbitrary
2   grouping of images designated by a user.

1   12.(Original)   The method of claim 1 further comprising, for each recipient, separating
2   the images associated with the recipient into one or more sub-orders.

1   13.(Original)   The method of claim 12 wherein separating the images associated with the
2   recipient into at least one printable unit of images includes, for each sub-order, separating the
3   images associated with the sub-order into one or more sub-batches, each sub-batch representing a
4   printable unit.

1   14.(Original)   The method of claim 13 wherein the images in a sub-batch have print
2   parameters that allow the sub-batch to be continuously printed.

1   15.(Original)   The method of claim 13 wherein a plurality of orders is received, the
2   images associated with each recipient specified in each order are divided into at least one sub-
3   order, and each sub-order is divided into at least one sub-batch.

1   16.(Original)   The method of claim 15 further comprising assembling at least one batch
2   including one or more sub-batches, wherein each sub-batch can be continuously printed on the
3   same type of printer.

1   17.(Original)   The method of claim 16 wherein the images in a batch have print
2   parameters that allow the batch to be continuously printed.

1   18.(Original)   The method of claim 16 wherein the at least one batch includes sub-
2   batches from two or more different sub-orders.

1   19.(Original)   The method of claim 16 further comprising scheduling the batches to be
2   printed in a predetermined ordering.

1   20.(Original)   The method of claim 19 wherein each order includes image data and
2   control data.

1   21.(Original)   The method of claim 20 wherein the control data includes at least one of
2   print parameters, user contact information, recipient information, payment information, and
3   message information.

1   22.(Original)   The method of claim 21 wherein the image data includes pixel data for the
2   images in the order.

1   23.(Original)   The method of claim 22 wherein the control data is used to control the
2   printing of the images.

1   24.(Original)   The method of claim 20 further comprising, before printing each image:
2   correcting the image data for that image using information including the control data; and
3   calibrating the image data using information including the control data and at least one
4   characteristic of the printer on which the image is to be printed.

1   25.(Original)   The method of claim 20 further comprising, for each batch, storing the
2   image data for the batch in a cache that is local to the selected printer for that batch.

1   26.(Original)   The method of claim 25 further comprising, for each batch, placing the
2   control data for the batch in a queue associated with the selected printer for that batch.

1   27.(Original)   The method of claim 26 further comprising, for each batch that is placed
2   in a queue, sending the image data associated with the images included in that batch to an image
3   processor associated with the selected printer for that batch.

1   28.(Original)   The method of claim 27 wherein, for each batch that is placed in a queue,
2   sending the image data for that batch to the image processor associated with that queue before
3   the batch reaches the front of the queue.

1   29.(Original)   The method of claim 1 further comprising verifying that an image print
2   was printed with the correct image.

1   30.(Original)   The method of claim 1 further comprising checking the quality of the
2   image print.

1   31.(Original)   The method of claim 13 further comprising:
2   combining the image prints from at least two sub-batches from the same sub-order; and
3   distributing the combined image prints to the recipient associated with the at least two
4   sub-orders.

1   32. (Original)   The method of claim 1 further comprising printing a destination identifier
2   print that identifies the specified recipient for a corresponding sub-batch of image prints.

1   33. (Original)   The method of claim 32 wherein the destination identifier print delimits
2   the corresponding sub-batch.

1   34. (Original)   The method of claim 32 wherein printing the destination identifier print
2   comprises printing one or more of the following items: a shipping address, a recipient's name, a
3   print index, a bar code, a textual message and/or print re-ordering information.

1   35. (Currently Amended)   A method of generating physical manifestations of digital
2   content on a plurality of output devices, the method comprising:

3   receiving an order specifying ~~one or more~~ a plurality of recipients and, for each specified

4   recipient, a set of digital content associated with that recipient;

5   for each recipient specified by the order, separating the digital content associated with the

6   recipient into at least one generatable unit of digital content having a contiguous run of prints for

7   the recipient; and

8   for each generatable unit of digital content, generating a physical manifestation of the

9   unit of digital content.

1   36.(Original) The method of claim 35 further comprising, for each generatable unit of

2   digital content, selecting an output device on which to generate a physical manifestation of the

3   unit of digital content.

1   37.(Original) The method of claim 36 wherein each generatable unit of digital content is

2   generated on the output device selected for that generatable unit.

1   38.(Original) The method of claim 35 further comprising distributing the physical

2   manifestations to their respective recipients.

1   39. (Original) The method of claim 35 wherein a set of digital content comprises one or

2   more digital images.

1   40. (Original) The method of claim 39 wherein the physical manifestation of the set of

2   digital content comprises photographic prints of the one or more digital images.

1   41.(Original) The method of claim 40 wherein the images in a generatable unit of

2   images have generation parameters that allow the generatable unit to be continuously generated.

1   42.(Original) The method of claim 41 wherein the print parameters include one or more

2   of print size, number of copies, and/or print finish.

1   43.(Currently Amended)   A print distribution system comprising:

2   a plurality of printers;

3   a front-end computer sub-system for receiving an order specifying ~~one or more~~ a plurality

4 of recipients and, for each specified recipient, a set of one or more images associated with that

5 recipient; and

6   a scheduler, connected to the front-end computer sub-system and the plurality of printers,

7 that for each recipient specified by the order (a) separates the images associated with the

8 recipient into at least one printable unit of images to generate a contiguous run of prints for the

9 recipient, and (b) designates a printer on which each printable unit is to be printed.

1   44.(Original) The system of claim 43 wherein each image has associated print

2 parameters.

1   45.(Original) The system of claim 44 wherein the images in a printable unit of images

2 have print parameters that allow the printable unit to be continuously printed.

1   46. (Original) The system of claim 43 wherein images in a first recipient's image set

2 differ from images in a second recipient's image set.

1   47. (Original) The system of claim 43 wherein print parameters of a first recipient's

2 image set differ from print parameters of a second recipient's image set.

1   48. (Original) The system of claim 47 wherein print parameters include one or more of

2 print size, number of copies, and/or print finish.

1   49. (Original) The system of claim 47 wherein print parameters differ among images

2 within an image set.

1   50. (Original) The system of claim 49 wherein print parameters include one or more of

2 print size, number of copies, and/or print finish.

1   51. (Original) The system of claim 43 wherein each image set comprises an arbitrary

2 grouping of images designated by a user.

1   52.(Original) The system of claim 43 wherein the scheduler:

2   for each recipient, separates the images associated with the recipient into one or more

3 sub-orders; and

4   for each sub-order, separates the images associated with the sub-order into one or more

5 sub-batches, each sub-batch representing a printable unit.

1   53.(Original) The system of claim 52 wherein:

2   the front-end computer sub-system receives a plurality of orders; and

3   the scheduler, for each recipient, separates each order into one or more sub-orders and,

4 for each sub-order, separates each sub-order into one or more sub-batches.

1   54.(Original) The system of claim 53 wherein the scheduler assembles at least one batch

2 including one or more sub-batches, wherein each sub-batch can be continuously printed on the

3 same type of printer.

1   55.(Original) The system of claim 54 wherein the scheduler schedules the batches to be

2 printed in a predetermined ordering.

1   56.(Original) The system of claim 55 wherein the scheduler uses a global scheduling

2 algorithm.

1   57.(Original) The system of claim 55 wherein the scheduler uses a just-in-time

2 scheduling algorithm.

1   58.(Original) The system of claim 55 further comprising a plurality of line controllers,

2 each line controller being associated with a printer and having a queue for storing the batches

3 until they are printed by the printer.

1   59.(Original)   The system of claim 58 wherein each order includes image data and
2   control data.

1   60.(Original)   The system of claim 59 wherein the control data includes at least one of
2   print parameters, user contact information, recipient information, payment information, and
3   message information.

1   61.(Original)   The system of claim 60 wherein the image data includes pixel data for the
2   images in the order.

1   62.(Original)   The system of claim 61 further comprising an image cache local to the
2   scheduler for caching the image data.

1   63.(Original)   The system of claim 58 further comprising an image processor associated
2   with at least one of the line controllers for processing the image data and at least a portion of the
3   control data prior to printing the image.

1   64.(Original)   The system of claim 63 wherein the image processor further comprises
2   image processor software in a computer-readable medium comprising instructions for causing
3   the image processor to perform the following operations:
4   correct the image data using information including the control data; and
5   calibrate the image data using information including the control data and at least one
6   characteristic of the designated printer.

1   65.(Original)   The system of claim 64 wherein the image processor software further
2   comprises instructions for causing the image processor to generate a destination identifier image,
3   wherein the destination identifier image can be used to print a destination identifier print that
4   identifies the specified recipient for a corresponding sub-batch of image prints and is generated
5   from at least the sub-batch's control data.

1   66.(Original)   The system of claim 65 wherein the destination identifier image for each
2   sub-batch is generated from the sub-batch's control data and image data.

1   67.(Original)   The system of claim 64 wherein the image cache includes software in a
2   computer-readable medium comprising instructions for causing the image cache to perform the
3   following operation:
4   in response to a message from the scheduler indicating that the scheduler has sent control
5   data for a batch to the line controller, send the image data for that batch to the image processor
6   associated with that queue.

1   68.(Original)   The system of claim 43 further comprising a backprinter for backprinting
2   at least one image print.

1   69.(Original)   The system of claim 68 wherein the backprinter backprints non-image
2   information on each image print.

1   70.(Original)   The system of claim 69 wherein the non-image information includes at
2   least one of an image number associated with the image, a printable unit number associated with
3   the printable unit from which the image print was printed, reorder information, a bar code, and a
4   message.

1   71.(Original)   The system of claim 70 wherein the message is an advertisement.

1   72.(Original)   The system of claim 71 wherein the bar code encodes at least one of an
2   audio message, the image number associated with the image, and the printable unit number
3   associated with the printable unit from which the image print was printed.

1   73.(Original)   The system of claim 59 further comprising a digital camera for capturing
2   data about at least one of the image prints.

1   74.(Original)   The system of claim 73 wherein the camera is a low-resolution camera.

1　　75.(Original)　The system of claim 73 wherein the captured data is used to verify that the
2　　an image print was printed with the correct image data.

1　　76.(Original)　The system of claim 73 wherein the captured data is used to check the
2　　quality of the image print.

1　　77.(Original)　The system of claim 43 further comprising an inverter that inverts each
2　　image print prior to backprinting.

1　　78.(Original)　The system of claim 77 further comprising a curl reduction equipment that
2　　reduces curling of the image print prior to backprinting.

1　　79.(Original)　The system of claim 78 wherein the curl-reduction equipment uses suction
2　　to reduce curling of the image print.

1　　80.(Original)　The system of claim 79 wherein the curling-reduction equipment device
2　　includes a vacuum table.

1　　81.(Original)　The system of claim 77 further comprising an alignment device that aligns
2　　each image print prior to backprinting.

1　　82.(Original)　The system of claim 81 wherein the alignment device includes:
2　　　　　an alignment wall against which each image print is to be aligned prior to backprinting;
3　　and
4　　　　　a skew conveyor that receives each image print after the image print has been printed and
5　　moves the image print towards the alignment wall as the skew conveyor conveys the image print
6　　to the backprinter.

1　　83.(Original)　The system of claim 82 further comprising an alignment sensor positioned
2　　laterally inward from the alignment wall that detects whether a portion of the image print is
3　　positioned immediately beneath the alignment sensor.

1   84.(Original) The system of claim 83 wherein the alignment sensor is a photosensor that
2 optically senses the presence of the image print.

1   85.(Original) The system of claim 43 further comprising a conveyor on which image
2 prints are stacked after printing.

1   86.(Original) The system of claim 85 further comprising a controller, connected to the
2 conveyor, that advances the conveyor so that a new stack can be stacked after all the image prints
3 in a printable unit have been stacked on the conveyor.

1   87.(Original) The system of claim 86 further comprising a plurality of bins, positioned
2 on the conveyor, so that the image prints for a printable unit are stacked in a bin.

1   88.(Original) The system of claim 87 wherein the bin comprises:
2   a base for supporting the bin when the bin is placed on a surface of the conveyor;
3   a first bottom wall connected to the base so that the first wall has a pitch incline with
4 respect to the surface of the conveyor; and
5   a second bottom wall connected to a first end of the first wall at one end, the second wall
6 and first wall forming an angle so that image prints received in the bin tend to stack on the first
7 bottom wall with an edge of each image print registering with the second bottom wall.

1   89.(Original) The system of claim 52 further comprising a storage device in which one
2 or more sub-batches can be stored for later combination with other sub-batches.

1   90. (Canceled) An alignment device used for aligning image prints, the alignment device
2 comprising:
3   an alignment wall against which each image print is to be aligned; and
4   a skew conveyor that receives each image print after the image print has been printed and
5 moves the image print towards the alignment wall as the image print is conveyed along the skew
6 conveyor.

1   91. (Canceled) The alignment device of claim 90 further comprising an alignment sensor

2   positioned laterally inward from the alignment wall that detects whether a portion of the image

3   print is positioned immediately beneath the alignment sensor.

1   92. (Canceled) The system of claim 91 wherein the alignment sensor is a photosensor that

2   optically senses the presence of the image print.

1   93. (Canceled) A bin for collecting image prints comprising:

2   a base for supporting the bin when the bin is placed on a surface;

3   a first bottom wall connected to the base so that the first wall has a pitch incline with

4   respect to the surface; and

5   a second bottom wall connected to a first end of the first wall at one end, the second wall

6   and first wall forming an angle so that image prints received in the bin tend to stack on the first

7   bottom wall with an edge of each image print registering with the second bottom wall.

1   94. (Canceled) The bin of claim 93 wherein the first bottom wall has an access notch

2   formed therein that provides access to any image prints stacked in the bin.

1   95. (Canceled) The bin of claim 93 further comprising a side wall mounted to a side edge

2   of the first and second bottoms walls.

1   96. (Canceled) The bin of claim 95 wherein the first bottom wall has a roll incline with

2   respect to the surface so that image prints received in the bin tend to stack on the first bottom

3   wall with an edge of each image print registering with the second bottom wall.

1   97. (Canceled) A method of tracking an order specifying a plurality of recipients and, for

2   each specified recipient, a sub-order of one or more images associated with that recipient,

3   wherein each image is to be printed, packaged, and shipped, the method comprising:

4   indicating that the image is in a first state when the order with which the image is

5   associated has been received from a user;

6   indicating that the image is in a second state when the image is being processed;

7   indicating that the image is in a third state when an image print created from the image

8 has been packaged; and

9   indicating that the image is in a fourth state when the image print has been shipped.

1   98. (Canceled) The method of claim 97 further comprising indicating that the image is in

2 a fifth state if the image is stored.

1   99. (Canceled) The method of claim 98, wherein the first state is an entered state, the

2 second state is a processing state, the third state is a packaged state, the fourth state is a shipped

3 state, and the fifth state is a stored state.

1   100. (Canceled)   The method of claim 97, further comprising, if an error is detected

2 while the image is in the second state and before the image is in the third state, reprinting the

3 image.

1   101. (Canceled)   A method of checking an image print that was printed from an

2 image stored in an electronic file, the method comprising:

3   generating a first image signature based on the electronic file;

4   generating a second image signature based on the image print; and

5   signaling an error if a predetermined criterion that is a function of the first and second

6 signatures is met.

1   102. (Canceled)   The method of claim 101 wherein generating the first image

2 signature includes sampling the electronic file to create a lower-resolution image based on the

3 image.

1   103. (Canceled)   The method of claim 102 wherein generating the second image

2 signature includes taking a picture of the printed image.

1   104. (Canceled)   The method of claim 102 wherein the Haar feature-recognition

2 algorithm is used to determine if the predetermined criterion is met.

1   105. (Canceled) The method of claim 103 wherein the pictures are taken at substantially

2   the same resolution as the lower-resolution image.

1   106. (Canceled)   The method of claim 105 wherein the lower-resolution image and

2   the picture each comprise a plurality of pixels.

1   107. (Canceled)   The method of claim 106 further comprising signaling a second

2   error if a predetermined number of pixels in the lower-resolution image do not match

3   corresponding pixels in the picture.

1   108. (Canceled)   The method of claim 101 wherein the predetermined criterion is

2   that the first and second signatures correlate within a predetermined tolerance.

1   109. (Canceled)   The method of claim 101 wherein checking comprises confirming

2   that the image prints are printed in the correct order.

1   110. (Canceled)   The method of claim 101 wherein checking comprises examining

2   the quality of the image prints.

1   111. (Canceled)   A method of generating an image print from an image, the method

2   comprising:

3   receiving an image;

4   printing the image to generate an image print;

5   reducing curling of the image print; and

6   backprinting information on the back of the image print.

1   112. (Canceled)   The method of claim 111 wherein the image includes image data

2   and control data.

1   113. (Canceled)   The method of claim 111 wherein the image is printed on a printer.

1   114. (Canceled)   The system of claim 113 further comprising, before printing the

2   image:

3   correcting the image data for the image using information including the control data; and

4   calibrating the image data using information including the control data and at least one

5   characteristic of the printer.

1   115. (Canceled)   The method of claim 111 wherein the information backprinted on

2   to the image includes non-image information.

1   116. (Canceled)   The method of claim 115 wherein the non-image information

2   includes at least one of an image number associated with the image, reorder information, a bar

3   code, and a message.

1   117. (Canceled)   The method of claim 116 wherein the message is an advertisement.

1   118. (Canceled)   The method of claim 117 wherein the bar code encodes at least one

2   of an audio message and an image number.

1   119. (Canceled)   The method of claim 118 wherein the image number is associated

2   with the image.

1   120. (Canceled)   The method of claim 111 further comprising inverting the image

2   print prior to backprinting.

1   121. (Canceled)   The method of claim 120 further comprising aligning the inverted

2   image print prior to backprinting.

1   122. (Canceled)   The method of claim 111 wherein curling of the image print is

2   reduced using suction.

1   123. (Canceled)   The method of claim 122 wherein curling of the image print is
2   reduced using a vacuum table.

1   124. (Canceled)   The method of claim 121 further comprising verifying that an
2   image print was printed with the correct image.

1   125. (Canceled)   The method of claim 111 further comprising checking the quality
2   of the image print.

1   126. (Canceled)   A print system for printing images, the system comprising:
2   a front-end computer sub-system that receives an order specifying one or more images
3   and one or more recipients;
4   a printer sub-system, connected to the front-end computer sub-system, that prints image
5   prints from the images in the order;
6   a packaging sub-system that receives image prints from the printer sub-system and
7   packages the image prints for shipment to the order's recipient; and
8   a shipping sub-system that receives the packaged image prints from the packaging sub-
9   system and ships the packaged image prints to the order's recipient;
10   wherein the images are processed automatically by the front-end sub-system, the printer
11   sub-system, the packaging sub-system, and the shipping sub-system.

1   127. (Canceled)   A method of distributing image prints comprising:
2   receiving set of one or more image prints, the set having one or more associated
3   recipients;
4   indicating which type of packaging material is to be used to package the set of image
5   prints based on information printed on at least one of the image prints in the set of image prints;
6   and
7   indicating which method of shipping is to be used to ship the set of image prints based on
8   information printed on at least one of the image prints in the set of image prints.

1   128. (Canceled)   The method of claim 127 further comprising packaging the set of
2   image prints using the indicated type of packaging material.

1   129. (Canceled)   The method of claim 127 further comprising shipping the set of
2   image prints using the indicated shipping method.

1   130. (Canceled)   The method of claim 127 wherein indicating which type of
2   packaging material is to be used includes lighting a light associated with the indicated type of
3   packaging material.

1   131. (Canceled)   The method of claim 127 wherein indicating which shipping
2   method is to be used includes lighting a light associated with the indicated shipping method.

1   132. (Canceled)   The method of claim 127 wherein the information printed on at
2   least one image print includes a bar code.

1   133. (Canceled)   The method of claim 132 further comprising reading the bar code
2   printed on at least one image print.

1   134. (Canceled)   The method of claim 133 wherein the type of packaging material
2   to be used to package the set of image prints is indicated based on the bar code.

1   135. (Canceled)   The method of claim 133 wherein the method of shipping to be
2   used is indicated based on the bar code.

1   136. (Canceled)   A packaging system comprising:
2   a plurality of packaging bins for storing image print packaging material;
3   a plurality of visual indicators, wherein each packaging bin is associated with at least one
4   visual indicator, wherein the visual indicators associated with the packaging bins are used to
5   indicate in which packaging bin the packaging material for a set of image prints is stored.

1   137. (Canceled)   The system of claim 136 further comprising a plurality of shipping

2   bins for storing packaged image prints, wherein each shipping bin is associated with at least one

3   visual indicator and at least one shipping method; and wherein the visual indicators indicate in

4   which shipping bin a packaged set of image prints should be stored for subsequent shipping by

5   the shipping method associated with the indicated shipping bin.

1   138. (Canceled)   The system of claim 137 wherein the visual indictors are used to

2   sort the packaged image prints by method of shipping.

1   139. (Canceled)   The system of claim 137 wherein each shipping bin is associated

2   with a range of weights.

1   140. (Canceled)   The system of claim 139 wherein the visual indictors are used to

2   sort the packaged image prints by weight and method of shipping.

1   141. (Canceled)   The system of claim 137 wherein each shipping bin is associated

2   with one or more ZIP codes.

1   142. (Canceled)   The system of claim 141 wherein the visual indictors are used to

2   sort the packaged image prints by ZIP code and method of shipping.

1   143. (Canceled)   The system of claim 136 wherein the visual indicators comprise a

2   plurality of lights.

1   144. (Canceled)   The system of claim 136 further comprising a display monitor, and

2   wherein the visual indictors are displayed on the display monitor.

1   145. (Canceled)   The system of claim 136 further comprising a storage rack for

2   storing image prints for subsequent combination with other image prints.

1   146. (Canceled)   The system of claim 145 wherein the storage rack further includes

2   plurality of cubby-holes, each cubby-hole having an associated visual indicator.

1   147. (Canceled)   The system of claim 146 wherein the visual indicators are used to

2   indicate in which cubby-hole a given image print is to be stored for subsequent combination with

3   other image prints.

1   148. (Canceled)   The system of claim 147 wherein the visual indicators are used to

2   indicate from which cubby-hole a given image print is to be removed for combination with other

3   image prints.